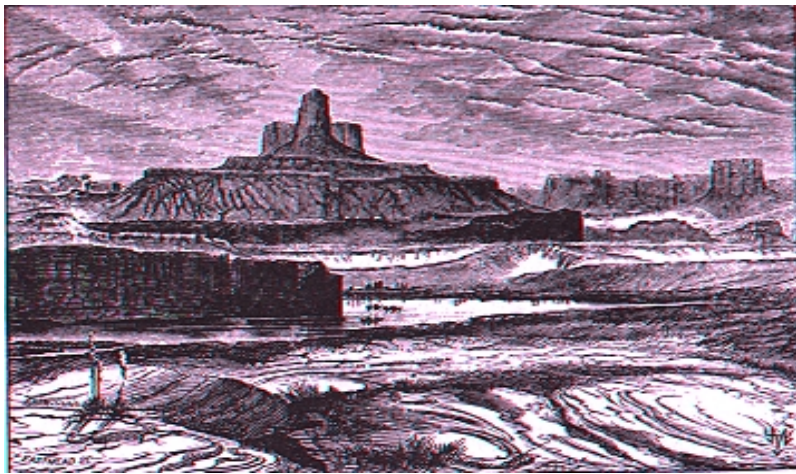


Canyonlands National Park, 1998 Jetboat Survey

FINAL REPORT

Submitted to
National Park Service
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BACKGROUND

During the summer of 1998, the University of Minnesota Cooperative Park Studies Unit (CPSU) University of Vermont, and University of Montana administered a river trip survey in Canyonlands National Park. The purpose of this study was to better understand river use and users on the Colorado and Green Rivers as well as to obtain knowledge of visitor attitudes toward potential management actions. Information gathered will be used to guide development of a river management plan for the Colorado and Green rivers through Canyonlands National Park.

Overnight campers on the Colorado and Green rivers were asked to complete a "Trip Diary" and "Post-trip Questionnaire." Also, participants of the annual Friendship Cruise were requested to contribute their views through the use of a separately administered 2 page questionnaire. To obtain additional input from river users, participants of half-day scenic jetboat tours on the Colorado River were given an opportunity to provide input through the completion of a 3 page questionnaire (appendix A).

DATA COLLECTION AND METHODS

To gain input from this user population, participants of Tag-A-Long's "Jetboat and 4 X 4 Adventure" were given an opportunity to complete a 3 page questionnaire. The scenic jetboat trips were part of a package tour comprised of a half-day jeep excursion into the backcountry of Canyonlands National Park followed by a half-day jetboat tour traveling upstream on the Colorado River toward the Potash landing.

The authors, in collaboration with Canyonlands National Park, provided the jetboat tour operator with the questionnaires. Jetboat tour participants were asked about their previous river trips in Canyonlands National Park, their reasons for taking a jetboat tour, what they liked best and least about their jetboat tour, and how satisfied they were with their jetboat tour. They also were asked about the number and types of watercraft seen during their jetboat tour within the park as well as their level of support for 8 potential river management actions in Canyonlands National Park. Boat drivers administered the questionnaires at the approximate upstream boundary of Canyonlands National Park (Mile Marker 34) on 12 sample days between July 1 and August 24. A total of 64 jetboat tour participants completed the questionnaire and returned it to their tour operator. Park Service staff collected the questionnaires from the outfitter and mailed them to the University of Minnesota for analysis. Data were analyzed using the Statistical Program for the Social Sciences (SPSS/PC+). Basic descriptive statistics were computed for selected variables.

SURVEY RESULTS

Nearly all respondents (98 percent) were on their first scenic jetboat tour in Canyonlands National Park (table 1). Only 2 percent had taken previous jetboat tours within the park. Participants gave a variety of reasons for taking a scenic jetboat tour. They often mentioned the scenery and viewing the landscape from a different perspective. Verbatim responses to question 2 are in appendix B.

Most respondents (95 percent) had not taken other river trips in Canyonlands National Park. Five percent had taken at least one previous river trip in the park (table 2). Participants' verbatim descriptions of the types of other river trips they had taken are in appendix C.

Respondents liked many different things about their river trip in Canyonlands National Park. The scenery, views, and information provided by the guide were routinely mentioned. Verbatim responses to question 4 are in appendix D.

Elements of the jetboat tour that respondents liked least included the jetboat engine noise and the heat. Verbatim responses to question 5 are in appendix E.

Of the respondents who answered the question about how satisfied they were with their jetboat tour, over 75 percent reported being *very satisfied* and nearly 25 percent reported being *satisfied*.

On average, rafts without motors were the most frequently encountered watercraft on the river within the park (3 rafts) followed by rafts with motors (2.4 rafts) (table 4). Jetboat tour participants generally rated the number of other watercraft they encountered as acceptable. Over 70 percent of all types of watercraft seen were given acceptability ratings of 8 or 9 (1=very unacceptable and 9=very acceptable). Mean acceptability scores for the number of watercraft seen within the park ranged from 7.7 to 8.3. Canoes and kayaks received the highest acceptability rating.

Respondents were asked their opinions about eight potential river management actions at Canyonlands National Park (using a scale where 1=strongly oppose, 2=oppose, 3=support, and 4=strongly support). The two most strongly supported management actions were: (1) providing more information to visitors about the natural and cultural history of the area (supported or strongly supported by 82 percent of the respondents) and (2) improving loading areas at put-in and take-out points (76 percent). The least supported management actions included: (1) limiting the number of canoes and kayaks allowed to use the river (opposed or strongly opposed by 47 percent of the respondents) and (2) limiting the number of nonmotorized rafts allowed to use the river (46 percent) (table 5).

Respondents answering the question about their state or country of residence came from 16 states and 8 foreign countries (table 6). The highest percentage (10 percent) were from France, followed by California (8 percent) and New York (8 percent). Of those responding, over one-quarter (28 percent) were international visitors.

Additional comments offered by respondents concerning their jetboat tour in Canyonlands National Park (question 10) are in appendix F.

TABLES OF SURVEY RESULTS

Table 1. Previous participation in scenic jetboat tours in Canyonlands National Park.

Frequency	N	Percent
Never	63	98.4
Once	1	1.6
Total	64	100.0

Source: 1998 jetboat survey.

Table 2. Incidence of other river trips taken by jetboat tour participants in Canyonlands National Park.

Previous river trips in Canyonlands National Park	N	Percent
No previous river trips	61	95.3
One or more previous river trips	3	4.7
Total	64	100.0

Source: 1998 jetboat survey.

Table 3. Overall satisfaction with jetboat tour in Canyonlands National Park.

Level of satisfaction	N	Percent
Very satisfied	48	76.2
Satisfied	15	23.8
Neither satisfied or dissatisfied	0	0.0
Dissatisfied	0	0.0
Very dissatisfied	0	0.0
Total	63	100.0

Source: 1998 jetboat survey.

Table 4. Visitor response to type and number of watercraft seen during their jetboat tour within Canyonlands National Park.

Type of watercraft seen	Number seen			Percent of respondents by acceptability of the number of watercraft seen**										
	N*	Mean	Median	Very unacceptable					Very acceptable					
				N*	Mean	1	2	3	4	5	6	7	8	9
Rafts, with motor	59	2.4	2	49	7.7	2.0	0.0	0.0	2.0	10.2	4.1	10.2	32.7	38.8
Rafts, without motor	57	3.0	2	45	8.2	0.0	2.2	0.0	2.2	0.0	2.2	8.9	24.4	60.0
Canoes and kayaks	57	1.6	0	31	8.3	0.0	0.0	0.0	6.5	6.5	0.0	3.2	9.7	74.2
Jetboats	56	0.5	0	36	7.7	0.0	0.0	0.0	2.8	16.7	2.8	5.6	30.6	41.7
Other	53	.04	0	13	8.2	0.0	0.0	0.0	0.0	15.4	0.0	7.7	7.7	69.2
Total number of ALL types of watercraft seen	53	7.3	6	38	7.7	0.0	0.0	0.0	5.3	7.9	10.5	5.3	34.2	36.8

Source: 1998 jetboat survey.

* Number of respondents answering the question.

** Responses based on a scale of 1 (very unacceptable) to 9 (very acceptable)

Table 5. Visitor response to potential management actions in Canyonlands National Park.

Management action	N	Mean*	Percent of respondents by response category				
			Strongly oppose	Oppose	Support	Strongly support	Don't Know
Provide more information to visitors about the natural and cultural history of the area	57	3.5	0.0	3.5	38.6	43.8	7.8
Improve loading areas at put-in and take-out points	59	3.4	3.4	5.1	27.1	49.2	15.3
Limit the number of motorized rafts allowed to use the river	60	3.1	5.0	13.3	40	30	11.7
Limit the total number of watercraft allowed to use the river	59	3.1	5.1	15.3	37.3	30.5	11.9
More park rangers along the river to enforce rules and regulations	59	3.0	3.4	10.2	42.2	20.3	23.7
Limit the number of jetboats allowed to use the river	59	3.0	6.8	13.6	40.7	23.7	15.3
Limit the number of canoes and kayaks allowed to use the river	58	2.5	12.1	34.5	25.9	15.5	12.1
Limit the number of nonmotorized rafts allowed to use the river	57	2.5	15.8	29.8	31.6	14	8.8

Source: 1998 jetboat survey.

* Rank ordered by sample mean scores: 1=strongly oppose, 2=oppose, 3=support, 4=strongly support

Table 6. State or country of residence of jetboat tour participants.*

State or country of residence	N	Percent
France	6	10.0
California	5	8.3
New York	5	8.3
Pennsylvania	4	6.7
Virginia	4	6.7
Florida	3	5.0
Illinois	3	5.0
New Hampshire	3	5.0
The Netherlands	3	5.0
Washington	3	5.0
Belgium	2	3.3
Germany	2	3.3
Michigan	2	3.3
Missouri	2	3.3
Nevada	2	3.3
North Carolina	2	3.3
Ohio	2	3.3
Austria	1	1.7
Canada	1	1.7
Georgia	1	1.7
Montana	1	1.7
Russia	1	1.7
United Kingdom	1	1.7
Utah	1	1.7

Total	60	100.0
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Source: 1998 jetboat survey.

* Of the participants who gave a state or country of residence, 17 (28 percent) were international visitors.

APPENDIX A

1998 Jetboat Survey

APPENDIX B

Verbatim comments from question 2 of 1998 jetboat survey

2. What are your primary reasons for taking a jetboat tour in Canyonlands National Park?

Scenic and unusual.

Because my wife told me to.

Couldn't see this in any other way.

Saw it advertised and thought it would be an interesting way to be on the river, especially for older people.

Sounded interesting and a good way to see the canyons.

Was talked into it by family.

Scenery.

Limited time to spend in this area (unfortunately). That's why we decided to have a half-day trip on boat and a jeep tour for the rest of the day.

Sounded interesting.

Vacation.

Vacation.

So we can see the best sites in the park.

To see the scenery.

Vacation.

Wanted the combo land and water.

Family.

Just doing something "different."

Adventure!

It's fun.

Total sightseeing experience in Canyonlands and to learn more about the park itself.

To view park from different viewpoint.

Seeing nature in another way being far away from the crowd.

Convenient, easy way to see the beauty of the Canyonlands.

Discovery of the Colorado and the Canyonland.

Scenery.

To see the park from the river.

Something different, new exper.

Round out our recreational experience.

To see places I couldn't get to any other way.

To visit inside the Canyonlands.

To keep cool while floating the river.

Pleasure, learn about this part of our country.

Limited time--wanted to take best advantage.

To be on a boat and in the river; see everything.

Vacation.

To discover the landscape.

Good cost. Good way to see the area.

Seemed like the thing to do.

To see as much of the canyon as possible.

To see things we couldn't see any other way in the amount of time we had to spend.

Scenery.

See the geology.

Larry.

My first time in Canyonland. I only stay 2 days in Moab. I saw pictures on the web.

Pleasure, discovery.

I thought it would be a great & different way to view the park.

Sightseeing in remote areas.

Fun.

We wanted to combine a jeep-tour with a boat-tour.

Easy sightseeing.

It sounded fun.

Sightseeing.

To see the sights.

To view areas inaccessible by car and boat trips are enriching for the human spirit.

We had a short time and wanted to see as much as possible.

View.

See scenery.

Recreation.

We have known it by friends.

To see sites off the beaten track.

To enjoy a trip on the river in a safe way. It requires less physical condition than with rafting or canoe trip.

Because our guide choose to go.

Exploring the N.P.

To learn about the landscape, culture and nature. To see as most as possible with only a small risk.

APPENDIX C

Verbatim comments from question 3 of 1998 jetboat survey

3. Have you taken other river trips in Canyonlands National Park? If yes, what types and how often?

Yes, floated 1990.

Yes, jeep trip.

White water rafting.

Elephant Hill 1994, Whitewater raft 1994.

APPENDIX D

Verbatim comments from question 4 of 1998 jetboat survey

4. What did you like most about your jetboat tour in Canyonlands National Park?

Scenic view.

It was upstream.

View from water--feeling of expansiveness.

You really get good views of the canyons.

The beauty of the canyon good.

Scenery.

Everything.

Stopping to see things.

Different type of trip.

Smooth ride.

Scenery and to say I been on the Colorado River.

Beautiful.

First time on Colorado.

The water.

The beautiful views, not so many people, the jokes in the 4x4.

Rob.

Seeing otherwise inaccessible terrain. Guide explanations & short stops along the way.

Seeing canyon's from floor of canyon.

Nature/tour by water.

Breeze (motion), scenery (great).

The Camel rock.

See distances in a short time.

Having a guide to explain the geology and the history.

Views, stops.

Unique perspective.

Seeing the formations & info from guide.

Explanations and landscape.

Swiftly moving a long/views.

The side hikes.

Geological phenomena.

Everything.

The views and guide.

To be able to discover the canyons from the bottom opposed to a car drive.

Scenery.

Scenery.

The beautiful scenery.

The information provided by the guide and, of course, the scenery.

View.

Covering numerous miles of river bottom.

Sights.

Quick.

The view.

Spectacular scenery.

The beauty all around us!

Watching the canyon from below & watching the vegetation.

Scenery.

The scenery.

Scenery/the captain (Mark) was very personable & knowledgeable.

The scenes were awesome & the guide was great!

Scenery and geographic insights, swimming.

Swimming & scenery.

Speed.

Swimming in Colorado River.

Swimming.

The speed.

It was beautiful country, not busy with other river traffic.

The speed & the scenic views.

Everything.

The nature.

The river & nature.

APPENDIX E

Verbatim comments from question 5 of 1998 jetboat survey

5. What did you like least about your jetboat tour in Canyonlands National Park?

Tied up too long.

'Twas ok.

Extended stopping.

The heat.

The noise of the engine (unavoidable).

Hot!!

This questionnaire.

Pit toilets.

I liked everything.

Rob's jokes.

Enjoyed whole experience.

Heat. Lack landing sites.

Ents.

Heat.

Lunch.

Dangerous to get on and off.

Loud engine.

Tracks off designated road.

The tracks off the roads.

Jeep tracks off the trail.

Jeeps not staying on main roads.

The tracks off the roadway.

Heat.

Dirty/sandy on water rather than clean--can't change.

Great trip.

No problems.

Noise of boat.

The heat?

We enjoyed it all!

Time spent loading boat. Time spent driving out of park.

It was sometimes hard to hear the guide.

The smell of the fuel of the jetboat.

Tourists with cameras, noiser funny toys and umbrellas against sun....masker...

APPENDIX F

Verbatim comments from question 10 of 1998 jetboat survey

10. Please offer any other comments you would like to make about your jeboat tour in Canyonlands National Park.

High boat use will detract from the natural beauty of the trip.

Great tour, really enjoyed it!!.

Leave the park as natural as possible. Absolutely no jet skis.

Wonderful!

Wonderful!!

It was great! Thanks.

We loved it!!

More information on Canyonlands expedition on the Web and possibilities of reservation.

Great trip.

Our driver was very good. It was relaxing and calming.

My wife & I were very happy with our jet boat expedition.

Park should be bigger.

John Weisheit was our guide and he did an excellent job. He was very knowledgeable about the history and geology of the area.

Celloce Plate?

Excellent and knowledgeable trip. Well worth the money.

Very fun!!

The [United] states should be open to other countries & have if not guides, at least more paper documentation in other languages.

Very good organization, very good information. We'll recommend it to our friends. The guides gave us the impression of serious interests for taking over thoughts about culture and nature.